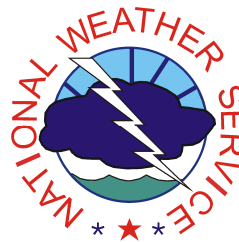




National Weather Service Tallahassee, Florida



Merry Christmas!



Happy Holidays!

In this newsletter:

- One last gasp for the Atlantic 2007 Hurricane Season
- Severe Weather Strikes South Central Georgia
- What is a significant weather alert?

One last gasp for the Atlantic 2007 Hurricane Season

Each year, hurricane season in the Atlantic runs from June 1st to November 30th. However, this doesn't mean tropical systems can only form during this portion of the year. In fact, in the exceptionally active hurricane season of 2005, two tropical systems either continued or formed outside hurricane season. Hurricane Epsilon (remember, we use the Greek Alphabet when we run out of names) continued through December 8, 2005, with Tropical Storm Zeta forming on December 30, 2005 and continuing through January 6, 2006. While

December 2007 NWS-Tallahassee Spotter Newsletter----- Page 2

the 2007 hurricane season was nowhere near as active as 2005, it did feature one tropical system forming outside hurricane season. Tropical Storm Olga formed near Puerto Rico on December 10th and continued until it dissipated on December 12th south of the Dominican Republic. However, as some of you may have noticed on satellite imagery, the remnants of Olga could be tracked all the way into the Gulf of Mexico and across Central Florida when it became caught up in a strong cold front.

Overall, the 2007 hurricane season ended essentially near to slightly above normal when compared to a 50 year average of data from 1950 to 2000.

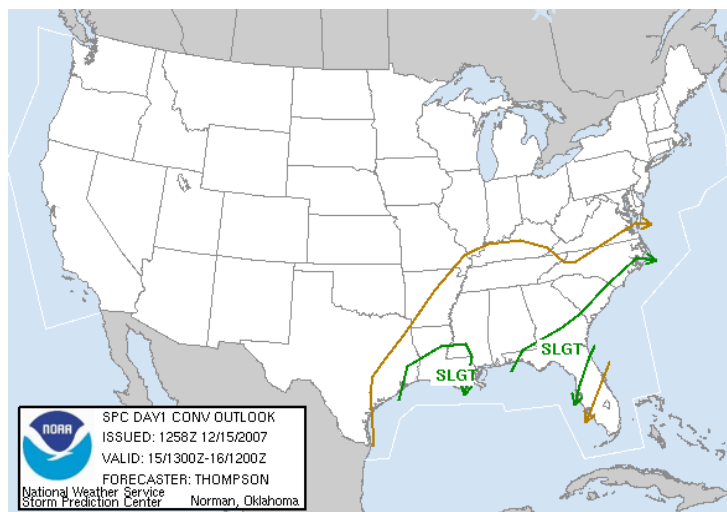
	2007 Hurricane Season Statistics	Normal Hurricane Season 1950-2000
Named Storms	14	10
Hurricanes	6*	6
Major Hurricanes (Winds >110 mph)	2	2

* Karen was upgraded to a hurricane following the post storm analysis in early December.

Severe Weather Strikes South Central Georgia

Early in the afternoon on Saturday, December 15th, a complex of storms begin to organize ahead of a strong cold front across the Central Gulf Coast States. The region had been outlined in a slight risk for severe weather by the Storm Prediction Center in Norman, OK. The Storm Prediction Center, or SPC, issues daily outlooks for thunderstorms all across the continental U.S. These outlooks provide local NWS forecasters with guidance on developing severe weather for the next seven days. It is also SPC that issues severe thunderstorm and tornado watches. SPC forecasters coordinate their outlooks and products with local NWS offices to ensure critical weather information is conveyed to our users whenever severe weather threatens.

On December 15th, SPC issued this outlook:

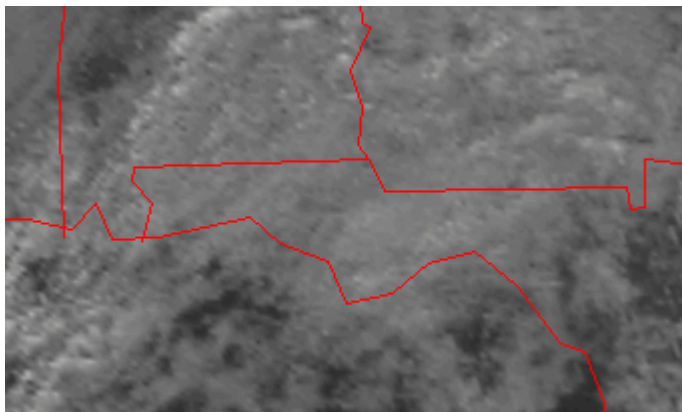


As you can see, most of our forecast area was highlighted in an area marked "SLGT". This means there is a slight risk for severe weather. The brown line on the graphic is the general thunderstorm outlook region. It is in this location that SPC predicts there to be thunderstorms. Some of these could reach severe limits, but the chance is more likely inside the slight risk area. For more information on how SPC assigns these risk areas, you can visit the following link:

<http://www.spc.noaa.gov/faq/#3.1>

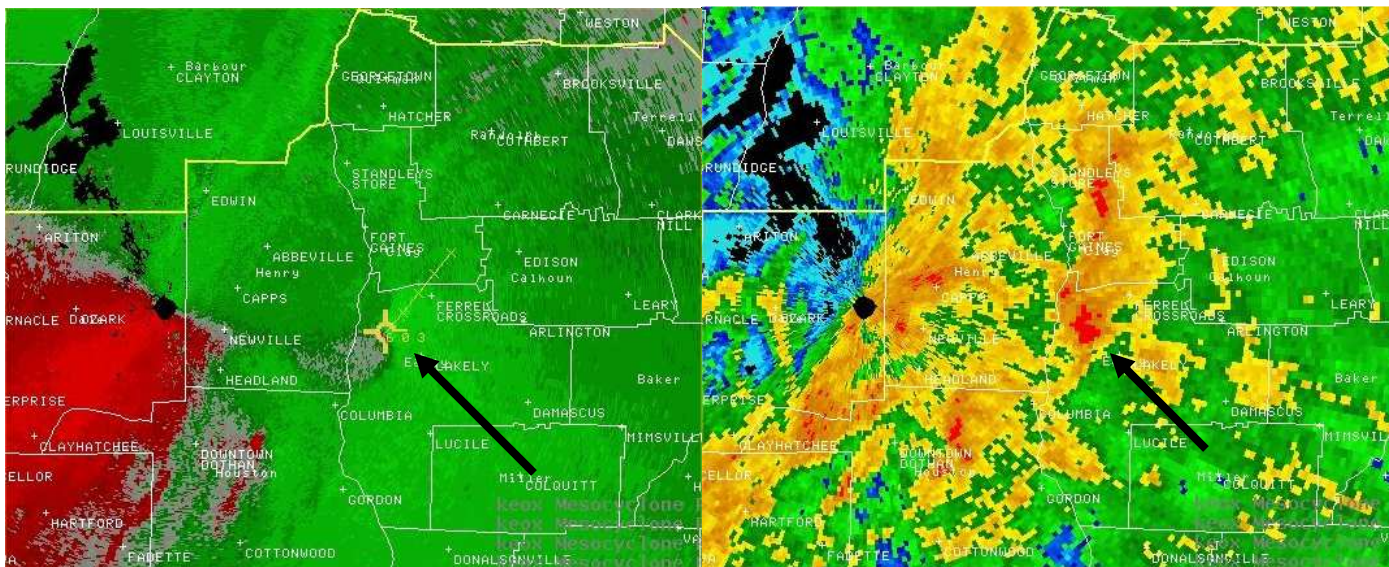
December 2007 NWS-Tallahassee Spotter Newsletter----- Page 3

As the day progressed, conditions continued to improve for the formation of severe weather. You may remember from your spotter training that three key ingredients need to come together to produce a severe weather event. These three ingredients are, instability, vertical wind shear, and lift. Our model analyses for the day, along with real time observations, indicated the last two ingredients, vertical wind shear and lift were present. As is often the case along the gulf coast in the wintertime, instability was limited. This was in part due to the thick overcast deck of clouds that had developed overnight and continued into the afternoon hours.



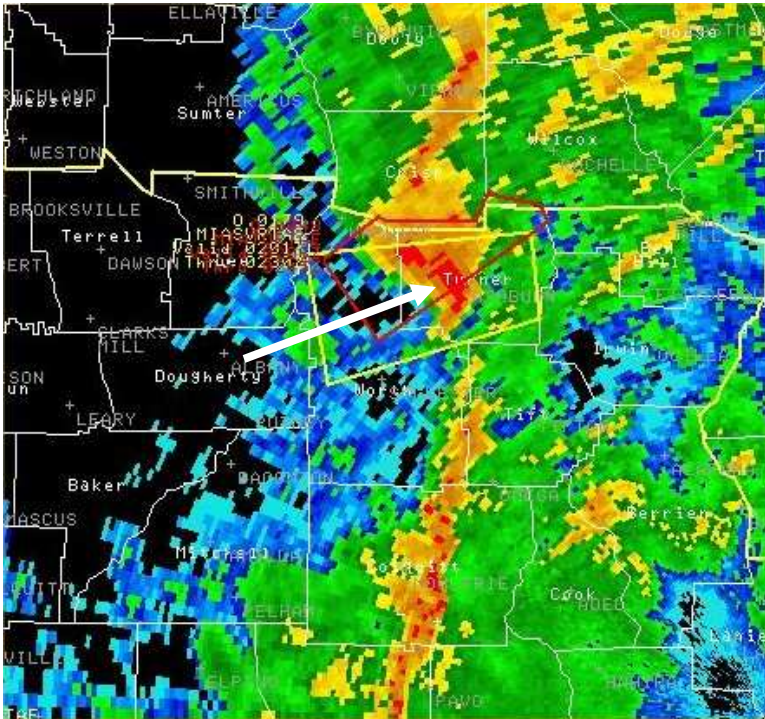
This satellite image taken at 1045 am EST shows how the entire forecast area was under thick cloud cover. Temperatures underneath this cloud deck did warm into the low to mid 70s by afternoon. Southerly winds ahead of this storm system helped contribute enough warming to generate some instability. A vigorous line of showers and thunderstorms formed about two hours after this image was taken near Mobile, Alabama.

As storms approached our forecast area, SPC issued a tornado watch for the entire forecast area. This tornado watch meant that conditions were favorable for thunderstorms to produce tornadoes. Within the next few minutes, tornado warnings were issued by our office based on rotational signatures seen on our Doppler radars. The first warning was issued for central Houston County. While no tornado was reported there, this same storm tracked into Early County, prompting another tornado warning. Damage northwest of Blakely was reported after the storm passed, and this damage was later confirmed to be from a tornado. The two images below are of the storm relative velocity image (left) and reflectivity image (right) of the storm. The target symbol on the left is our computer algorithm indicating strong low level rotation.



December 2007 NWS-Tallahassee Spotter Newsletter----- Page 4

The next tornado did not occur until later that evening near Sylvester, Georgia. This tornado caused moderate damage west of Sylvester and near the community of Isabella. This same tornado also caused major damage in Ashburn, Georgia. It resulted in one fatality on Interstate 75 when a trucker was blown off the highway.



This reflectivity image (914 pm EST) was taken just before the tornado reached Ashburn, Georgia. The white arrow is pointing to the approximate position of the tornado. Notice that this image includes both a yellow and red polygon. On October 1, 2007, the NWS switched from issuing county-based warnings and began issuing them based on the projected path of the storm. In this case, Ashburn and areas to the northwest were under a tornado warning. Locations south of Ashburn were under a severe thunderstorm warning. These warning polygons can be seen on our radar displays on the internet as well as on our main page.

One of our storm spotters, Mr. Roland Dickson, was in the path of this tornado when it first touched down in Worth County. After the storm had passed, he gave information to our forecasters about the damage. Earlier this week, I was able to discuss the event with him. I'd like to share a portion of his story about this storm with you.

The "Significant Weather Alert" around 15 min before this thing hit was our life saver. Had this not happened and we were 10-15 seconds later getting through the kitchen to our semi-safeplace we would --well I'll leave it there. Thanks for the timely alert. Had this thing not have formed almost on top of me I would have heard the warning. We were lucky and it could have been a lot worse. I have finally gotten up close and personal with a Tornado---I think I have had enough. I'll spot from a safe distance. This EF-0 was enough for me.

*Again thanks and I am glad to be a small part of your organization
Roland T. Dickson*

Mr. Dickson received notice of the tornado watch earlier by his NOAA Weather Radio. He knew at this point that conditions were favorable for a tornado. It was later that night that his radio alarmed for a "Significant Weather Alert," and while he and his wife were taking shelter, the warning was issued. This is a great story that

December 2007 NWS-Tallahassee Spotter Newsletter----- Page 5

shows why having a NOAA Weather Radio can be a lifesaver. These radios can be programmed to alarm for your county and deliver lifesaving information.

Below are three pictures from Mr. Dickson's house, the large window blown out was where he and his wife were sitting before seeking shelter in a safer location.



What is a Significant Weather Alert?

A few years ago, our office began issuing significant weather alerts. These alerts were for thunderstorms that were strong, but just below severe limits. Many times, strong thunderstorms can cause damage to homes or down trees. In fact, a significant weather alert may be issued to give additional advance notice of dangerous storms approaching within the next hour. In the storm that struck Mr. Dickson's house, the significant weather alert was issued for a storm that was continuing to strengthen. Shortly after the alert was issued, a severe thunderstorm warning was issued, followed quickly by a tornado warning. This process of quickly escalating from significant weather alert to tornado warning can happen in storms that strengthen rapidly.

During the summer months, significant weather alerts are issued more frequently. They may be issued for strong storms producing frequent to continuous lightning. A significant weather alert can be issued for any of the following situations:

- A strong thunderstorm producing wind gusts of 30 to 55 mph.
- A strong thunderstorm producing frequent to continuous cloud to ground lightning
- A line of strong to severe thunderstorms still an hour or more away to give advanced notice of the developing weather situation.

What should you do during if a significant weather alert is issued?

- Seek immediate shelter in a sturdy location. All thunderstorms produce lightning and the safest place to be is inside a sturdy structure. Moreover, thunderstorms producing wind gusts of 30 to 55 mph will be capable of knocking large limbs out of trees and pushing over weaker trees.
- Listen for any warnings that may follow. In some instances going inside your home will suffice for a significant weather alert, however, if a severe thunderstorm or tornado warning is issued for your area, you should immediately move to your safe room. This safe room will typically be the innermost room of your home away from windows. Mobile homes should not be used as shelters in tornadoes. Also, mobile homes can be significantly damaged in severe thunderstorms.

One last word...

As 2007 comes to a close across our region, all of us here at NWS-Tallahassee want to express our appreciation to you for being part of our SKYWARN Spotter Program. The reports you provide help us do our job better and in turn help inform the public of dangerous and life threatening storms.

We hope you all enjoy this Holiday Season and have a Merry Christmas and a Happy New Year in 2008.

Paul Duval
Meteorologist in Charge

Bob Goree
Warning Coordination Meteorologist

Irv Watson
Science and Operations Officer

Joel Lanier
Service Hydrologist

Kelly Godsey
Skywarn Program Leader

And the rest of the staff at NWS Tallahassee